09/912,485
01USFP659-M.K.

AMENDMENTS TO THE CLAIMS:

1.   (Currently amended) A gatekeeper connected to an H323 network, comprising:

a first message receiving section which receives a gatekeeper discovery message from an end point;

a transport data transmitting section; and

a control section which:

upon said first message receiving section receiving said gatekeeper discovery message, refers to a load state list to determine ~~determines~~ whether said gatekeeper has the lightest load among a plurality of gatekeepers including said gatekeeper; and

controls said transport data transmitting section to transmit transport data to said end point in response to the gatekeeper discovery message, when it is determined that said gatekeeper has the lightest load.

2.   (Original) The gatekeeper according to claim 1, wherein said control section controls said transport data transmitting section not to transmit transport data in response to the gatekeeper discovery message, when it is determined that said gatekeeper does not have the lightest load.

3.   (Original) The gatekeeper according to claim 1, wherein said control section comprises:

a storage section which stores a load state list indicative of existence of any of said plurality of gatekeepers having lighter loads than said gatekeeper; and

a first control section which refers to said load state list to determine whether said gatekeeper has the lightest load among said plurality of gatekeepers including said gatekeeper, and controls said transport data transmitting section to transmit transport data to said end point in response to the gatekeeper discovery message, when it is determined that said gatekeeper has the lightest load.

2

09/912,485
01USFP659-M.K.

4.   (Previously presented) The gatekeeper according to claim 3, wherein said control section further comprises:

a load state notice message receiving section which receives a load state notice message from another gatekeeper of said plurality of gatekeepers as a notice transmitting gatekeeper, said load state notice message including a load of said notice transmitting gatekeeper;

a calculating section which calculates a load of said gatekeeper as a self-load; and

a second control section which extracts the load of said notice transmitting gatekeeper from said load state notice message, and compares the extracted load and the self-load, and writes an identifier of said notice transmitting gatekeeper at least into said load state list, when the extracted load is lighter than the self-load.

5.   (Previously presented) The gatekeeper according to claim 4, wherein said control section further comprises:

a load state request message transmitting section,

wherein said second control section controls said load state request message transmitting section to transmit a load state request message with an identifier of said gatekeeper and said self-load to other gatekeepers of said plurality of gatekeepers, and

wherein said other gatekeepers selectively reply by transmitting said load state notice message to said gatekeeper based on a load of said other gatekeepers.

6.   (Previously presented) The gatekeeper according to claim 3, wherein said control section further comprises:

a load state request message receiving section which receives said load state request message with an identifier of said other gatekeepers and the load of said other gatekeepers; and

a load state notice message transmitting section, and

3

09/912,485
01USFP659-M.K.

wherein said second control section extracts the load of said other gatekeepers from said load state request message, and compares the extracted load and the load of said gatekeeper as a self-load, and controls said load state notice message transmitting section to transmit a load state notice message with the self-load and said identifier of said gatekeeper to said other gatekeepers, when the extracted load is lighter than the self-load.

7.   (Original) The gatekeeper according to claim 6, wherein said second control section discards said load state request message, when the extracted load is not lighter than the self-load.

8.   (Currently amended) A load distributing method in a communication system which comprises a network, an end point operatively connected to said network, and a plurality of gatekeepers including first and second gatekeepers, said method comprising:
    receiving a gatekeeper discovery message from said end point in said first gatekeeper;
    upon said first message receiving section receiving said gatekeeper discovery message, referring to a load state list which indicates identifiers of ones having lighter loads, of said plurality of gatekeepers, in said first gatekeeper to determine whether said first gatekeeper has the lightest load among said plurality of gatekeepers; and
    transmitting transport data to said end point in response to said gatekeeper discovery message in said first gatekeeper, when it is determined that said first gatekeeper has the lightest load.

9.   (Previously presented) The load distributing method according to claim 8, further comprising :
    ignoring said gatekeeper discovery message, when it is determined that said first gatekeeper does not have the lightest load.

4

09/912,485
01USFP659-M.K.

10.   (Previously presented) The load distributing method according to claim 8, further comprising:

calculating a load of said first gatekeeper as a first load;

receiving a load state notice message including a load of said second gatekeeper as a second load from said second gatekeeper;

extracting said second load from said load state notice message;

comparing said first load and said second load; and

writing an identifier of said second gatekeeper into said load state list, when said second load is lighter than said first load.

11.   (Previously presented) The load distributing method according to claim 10, further comprising:

transmitting a load state request message with an identifier of said first gatekeeper and said first load to said second gatekeeper.

12.   (Previously presented) The load distributing method according to claim 10, further comprising:

receiving said load state request message with an identifier of said second gatekeeper and said second load;

extracting said second load from said load state request message;

comparing the extracted second load and said first load; and

transmitting a load state notice message with said first load and said identifier of said first gatekeeper to said second gatekeeper, when the extracted second load is lighter than said first load.

13.   (Previously presented) The load distributing method according to claim 12, further

5

09/912,485
01USFP659-M.K.

comprising:

discarding said load state request message, when the extracted second load is not lighter than said first load.

14.   (Previously presented) The gatekeeper according to claim 1, wherein a load distribution is carried out to equalize a load autonomously between gatekeepers in said plurality of gatekeepers.

15.   (Previously presented) The gatekeeper according to claim 1, wherein said load comprises a ratio of a number of actual registrations to a maximum number of registrations which can be registered by said gatekeeper.

16.   (Previously presented) The gatekeeper according to claim 5, wherein said second control section controls said load state request message transmitting section to periodically transmit said load state request message.

17.   (Previously presented) The gatekeeper according to claim 1, wherein said control section controls said transport data transmitting section to transmit transport data to said end point in response to the gatekeeper discovery message only when it is determined that said gatekeeper has the lightest load.

18.   (Previously presented) The load distributing method according to claim 8, wherein said first gatekeeper is independent of said second gatekeeper and shares information with said second gatekeeper.

19.   (Previously presented) The load distributing method according to claim 8, wherein said first and second gatekeepers autonomously determine which of said first and second gatekeepers

6

09/912,485
01USFP659-M.K.

has a lightest load.

20.   (Currently amended) A packet network, comprising:

a plurality of gatekeepers, a gatekeeper in said plurality of gatekeepers comprising:

a first message receiving section which receives a gatekeeper discovery message from an end point;

a transport data transmitting section; and

a control section which:

upon said first message receiving section receiving said gatekeeper discovery message, refers to a load state list to determine determines whether said gatekeeper has the lightest load among said plurality of gatekeepers; and

controls said transport data transmitting section to transmit transport data to said end point in response to the gatekeeper discovery message, when it is determined that said gatekeeper has the lightest load.

21.   (New) The gatekeeper according to claim 1, further comprising:

a load state request message transmitting and receiving section for transmitting a load state request message to another gatekeeper in said plurality of gatekeepers and receiving a load state request message from said another gatekeeper; and

a load state notice message transmitting and receiving section for transmitting a load state notice message to said another gatekeeper and receiving a load state notice message from said another gatekeeper.

22.   (New) The gatekeeper according to claim 21, wherein said control section comprises:

a load state calculating section for calculating a load state for said gatekeeper;

a load state list generating section which generates a load state list;

7

09/912,485
01USFP659-M.K.

a memory section for storing said load state list; and

a message control section which:

extracts a load state of said another gatekeeper from a load state request message of said another gatekeeper, compares said extracted load state of said another gatekeeper with said calculated load state of said gatekeeper, and when said calculated load state of said gatekeeper is less than said extracted load state of said another gatekeeper, causes said load state notice message transmitting and receiving section to transmit a load state notice message to said another gatekeeper; and

extracts a load state of said another gatekeeper from a load state notice message of said another gatekeeper, compares said extracted load state of said another gatekeeper with said calculated load state of said gatekeeper, and when said extracted load state of said another gatekeeper is less than said calculated load state of said gatekeeper, outputs an identifier of said load state notice message to said load state list generating section.

23.   (New) The gatekeeper according to claim 22, wherein said control section further comprises:

a reply control section which:

refers to said load state list stored in said memory section when said gatekeeper discovery message is received from said end point to determine whether said gatekeeper has a lightest load state of said plurality of gatekeepers; and

if said gatekeeper has a lightest load state of said plurality of gatekeepers, causes said transport data transmitting section to transmit said transport data to said end point from which said gatekeeper received said gatekeeper discovery message.

24.   (New) The gatekeeper according to claim 21, wherein said load state request message comprises a position data request message (LRQ) as defined in the H.323 recommendation, and

8

09/912,485
01USFP659-M.K.

wherein said load state notice message comprises a position data response message (LCF) as defined in the H.323 recommendation.

25.   (New) The gatekeeper according to claim 24, wherein a load state of said gatekeeper is set as a nonstandard parameter of said position data request message (LRQ).

26.   (New) The gatekeeper according to claim 1, wherein said load state list comprises identifiers of other gatekeepers in said plurality of gatekeepers from which said gatekeeper received a load state notice message.

9